

PC43	EC 1	ASTVIHYEIPPEFEREK	-----	GFAVGNVVAVL--	GLDLGSLSA--	
	EC 2	PTQEMKLEISEAVAP	-----	GTRFPLESAH--	DPDLGNSL--	
	EC 3	NOSLYRARVPGGETS	-----	GTRVQVLAT--	DLDEGPNGE--	
	EC 4	TVTSVSPVPEDAS-	-----	GTIVIALLSVT--	DLDAEGLL--	
	EC 5	SOSSYDVYIEENNLP	-----	GAPILNLSSW--	DPDAONAR--	
	EC 6	LYPRPGGSSVEMLPRTSA	-----	GHLVSRVVGW--	DADAGHNAW--	
PC42	EC 1	VPEEQPNLTI-----	GSL-----	AADYGFDPVG-		
	EC 2	ASPVITLAIPENTNI	-----	GSLFPIPLAS-----	DRDAGPVG--	
	EC 3	ERPSYEAELESNSPI	-----	GHSVIVOKAN-----	DSDGNAE--	
	EC 4	EIRGIGLVTHODGMAN	-----	DSVDEAETAVALVQSVDRDEGENIA--		
	EC 5	TOSYTEVAPFENNIKP	-----	GEVIAETIAS---DADSGSNAE--		
	EC 6	MLSGYNFSVMMNPA-----	LSPVGMVTVI-----	DGDKGNAQ--		
	EC 7	TAPSNTSHKLITPOTRL	-----	GETVSQAAE---DFDSGVNAE--		
FAT	EC18	EDTVYSFDIPENAQR	-----	GYQVGOIVAR--	DADLGQNAQ--	
	EC18	EDTVYSFDIPENAQR	-----	GYQVGOIVAR--	DADLGQNAQ--	
N-CAD	EC 1	DIVNIPPINLPENSRG	-----	PFPQELVRIRS--	DRDKNLSLRYT	
	EC 2	LHQNNGTVPEGSKP	-----	GTYWMTVTAI--	DADDPNALMG	
	EC 3	TAMTFYGEVPENRVD	-----	IVANLTVT--	DKDQPHTPAWN	
	EC 4	APNPKITROEEGLHA	-----	GTMLTTFTAG--	DPDRYMQON--	
	EC 5	LPQEAEETCPDPNSINITAL	-----	-----	DYDIDPNAGP-	
MOTIF						
*****O*****V*E*N*****-----G*V***V*A*-----D*D*G*N*N*-----						

FIGURE 1A

PC43	EC 1	RRFPVVGASRR-----FFEVNRET-----GEMVNDR-----
	EC 2	QTYELSRNEY-----FALRVQTEDSTKTAELVLERA-----
	EC 3	IIYSFGSHNRAGVRQL-----FALDLVT-----GMLTIKG-----
	EC 4	VTCEVPPGLP-----FSLTSSLKNYFTLKTSA-----
	EC 5	LSFFLLEQGAETGLVGRFTINRDN-----GIVSSLVP-----
	EC 6	LYSLSFSPNQSL-----FAIGLT-----GOISTARP-----
	EC 7	
PC42	EC 1	HLYKLEVYAP-----YLRDGKT-----GDIFFTTTS-----
	EC 2	ASYLQVAED-----QEEKOPOLIVMGN-----
	EC 3	IEYFROAPEVVRR-----LRLDRNT-----GLITVQGP-----
	EC 4	VTCVVAGDVP-----FQLRQAETGSDSKKKYFLQTTP-----
	EC 5	LVYSISLEPEAAKGL-----FTISPET-----GETOKTS-----
	EC 6	VQLSVEODNGD-----FVIONQNT-----GTLSSLS-----
	EC 7	LIYSTIAGGNPYGL-----FQIGSHS-----GAITLEKE-----
FAT	EC18	LSYGIVVSDWANDV-----FSLNPQT-----GMLTILTR-----
	EC 1	VTGPAGADOPPTGI-----FIINPI-----GOLSVTKP-----
	EC 2	LRYRIVSOAPSTPSPNM-----FTINNET-----GDLITVAAG-----
	EC 3	AVYRISGGDPTRGR-----FAIQTDNSND-----GLITVWK-----
	EC 4	TRYTKLSDPAN-----WLKIDPN-----GOITTIAV-----
	EC 5	FAFDLPLSPVTIKRN-----WTITRLN-----GDFAQNLK-----
N-CAD	EC 1	I*0*I*****0*I***T-----G*I*T***-----
	EC 2	
	EC 3	
	EC 4	
	EC 5	
Motif		

FIGURE 1B

PC43	EC 1	LDRLLECGTIPSCSTVTLIIVENP-----	LELFSVEVVTODINDNNPAPF
	EC 2	LDREREPSLQLVLTALDGGTPAL-----	SASLPIHKVLDANDNAPF
	EC 3	LDFEDTKLHEVYIOAKDGKANPE-----	GAHCKVLVEVVDNDNAPF
	EC 4	LDRETYPEYNLSITARDAGTPSL-----	SALITIVRVOVSIDINDNPPS
	EC 5	LDYEDRREFELTAHISDGGTPL-----	-ATNISVNIFVDRDNAPF
	EC 6	QDTSQRTLTVL-IKONGEPLSLSLTATLT	SPERAEGFSGSAPREQKVN
PC42	EC 1	IDREGLRECONOLPGDPCILEEFFSITDLVNAS-----	-PRLEQIEVODINDNTPNF
	EC 2	LDREWRDSYDOLTLTKVQDGSSPR-----	-ATSALLRTVLDINDNAPKF
	EC 3	VDREDLSTLRFVSLAKDRTGTPK-----	SARAOVWVTVKMDNDNAPTI
	EC 4	IDYEKVKDYYTTEVAVDSGNPL-----	SSTSNLKVQVVDNDNAPVF
	EC 5	LDREORESYELKVAADRGSPSL-----	-QGATAVLVNVLDCNDNDPKF
	EC 6	FDREQOSTYTFOLKAVDGGYPPR-----	SAYGVTINVLDEINDNAPYI
	EC 7	TERHHHGLHLRLVVKSDRGKPRYGTALVHLVYNETLANRLLTLLGHSLDTPLD	IDIAGDPEYERSKORGN
FAT	EC18	LDYEEVQHYLIVOAQDNGOPS-----	STTIVYCNVLDDNDNAPF
N-CAD	EC 1	LDREOJARFHRLRAHAVDINGNOV-----	ENPIDIVINVIDMNDNRPFF
	EC 2	LDRENVQQTLLIOATDMEGIPYGL-----	SNATAVITVTDNDNPPF
	EC 3	IDFETNRMFVLTVAAENQVPLAKGQHPP-----	QSTATAVSVTVIDWNE-NPF
	EC 4	LDRESPNWKNTYNATFLASDNGIPP-----	SGTGTLOIYLLDINDNAPQV
	EC 5	TKFLEAGIYEVPITITDSGNPKSNIS-----	ILRIVRCQDFNGDCTDVR
MOTIF		LDRE*****0*L*v*A*D*g*P*-----	***T*TV*v*V*D*NDNAP*F

FIGURE 1C